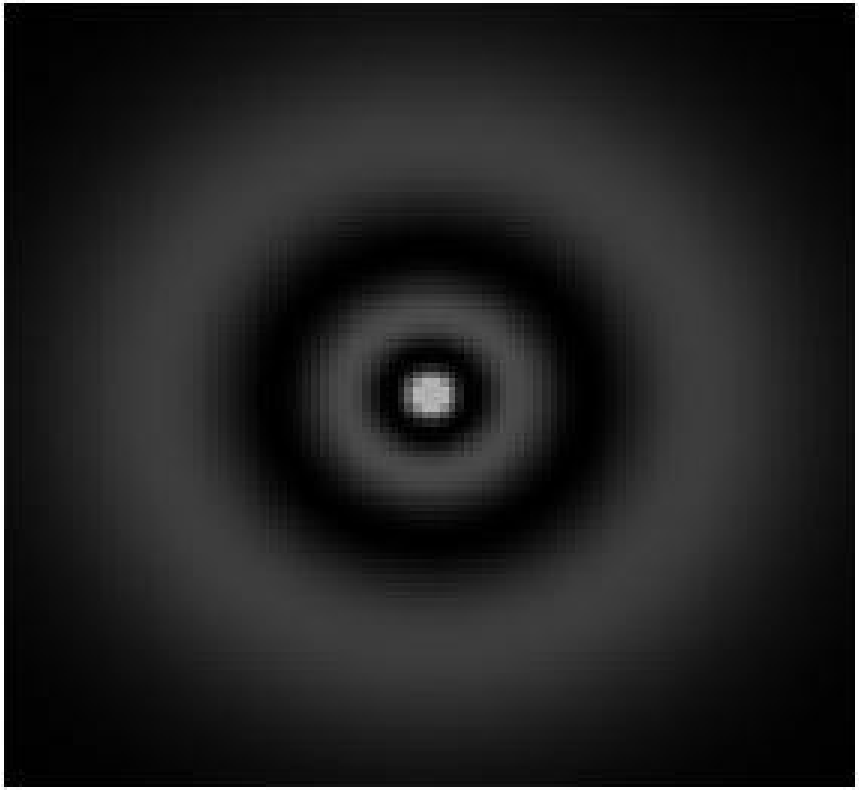

Cross-sectional view of the electron probability density for the n = 3, $l = 0$ hydrogen orbital. The total number of nodes is n – 1 = 2, the number of spherical nodes is n – l – 1 = 2, and the number of planar nodes is $l = 0$. So the 3s orbital has two spherical nodes and no planar nodes.